U.S. Electricity Demand Is Outpacing New Resources, Report Warns (Wall Street Journal)

By REBECCA SMITH

A report by the North American Electric Reliability Council warns demand for electricity is increasing three times as fast as resources are being added in the U.S., a trend that could shake electric-system reliability in the coming decade.

In its first report since the organization's duties were expanded by Congress, the grid organization, known as NERC, said U.S. demand will increase by about 20% from 2006 to 2015, outstripping investment in new electrical supply. The pace of growth in Canada, while slower, also is cause for concern.

NERC counts 67,000 megawatts of resources in the works in the U.S. versus 141,000 megawatts of expected demand growth by 2015, leaving a shortfall of about 81,000 megawatts, an amount equivalent to 160 large power plants. One megawatt can power 500 to 1,000 homes.

Increasingly, it is left to a deregulated market to determine whether and when new resources get built. Available resources are expected to fall below safe levels in many parts of the U.S. and Canada, such as New England, the Rocky Mountain region and Texas, in the next two to three years.

As the system drifts closer to its physical limits, it is even more important that energy regulators and utilities promote conservation and use of the most energy-efficient equipment, said Rick Sergel, chief executive of the grid reliability organization. He added conservation programs will need to at least double their reach and effectiveness to help close the gap between supply and demand.

The report said 50,000 megawatts of generating plants are poorly utilized -- either aged units taken out of service or newer plants that have been unable to line up contracts, making them nearly useless.

"We've got a problem," Mr. Sergel said. "We can't continue this 'just-in-time' planning much longer. It works in manufacturing but it does not work in the power sector."

Mr. Sergel said NERC, a nonprofit industry organization with some powers granted by Congress, is pushing for more-comprehensive resource planning and it is attacking tools that it considers flawed.

For example, grid officials create annual forecasts that are built around "normal weather" patterns. Mr. Sergel said warmer winters and hotter summers are challenging conventional notions of normalcy. This past summer, consumer demand set records in

most parts of the U.S., reaching levels not expected for several years and worrying grid officials. The increase came on top of unusual demand during the summer of 2005 that was 6% higher than in 2004, according to the U.S. Energy Information Administration.

NERC intends to develop tools to determine "normal weather" for the eight regional reliability organizations that report to NERC to use when creating their forecasts. Where available resources are thinning, NERC may push state utility regulators to do more to promote investment. If investment isn't sufficient, the federal government could exercise new powers, conferred in the 2005 Energy Policy Act, to site major transmission projects.

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